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## INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/34684

## A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : A61K 38/17  
 US CL : 530/353

According to International Patent Classification (IPC) or to both national classification and IPC

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
 U.S. : 530/353

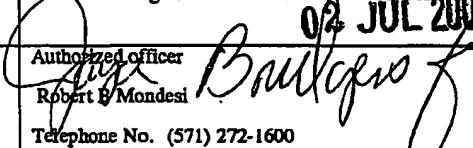
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)  
 East, STN Bioscience cluster: Medline, Caplus, Biosis, Patents and PCTFull.

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	AYUB, Z.H et al. Mechanism of the Gelation of Fibroin Solution. Biosci. Biotech. Biochem. May 1993, Vol. 57, No. 11, pages 1910-1912, especially page 1910.	1, 3, 5-8
A	BUNNAK, J. et al. Study on Antibacterial Activity of Hydrogel from Irradiated Silk Protein. JAERI Confer. May 2001, pages 117-129, especially page 118-119.	1-30
X	DINERMAN, A.A. et al. Swelling Behavior of a Genetically Engineered Silk-elastinlike Protein Polymer Hydrogel. Biomaterials. May 2002, Vol. 23, pages 4203-4210, especially pages 4205-4206.	1, 5-8, 15
A	ZHANG, Y. Applications of Natural Silk Protein Sericin in Biomaterials. Biotechnology. June 2002, Vol. 20, pages 91-100.	1-30
A,T,E	JIN, H.J. et al. Biomaterial Films of Bombyx Mori Silk Fibroin with Poly(ethylene oxide). Biomacromolecules. January 2004, Vol. 5, pages 711-717, especially page 712.	1-30

<input type="checkbox"/>	Further documents are listed in the continuation of Box C.	<input type="checkbox"/>	See patent family annex.
*	Special categories of cited documents:	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A"	document defining the general state of the art which is not considered to be of particular relevance	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"B"	earlier application or patent published on or after the international filing date	"Y"	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"Z"	document member of the same patent family
"O"	document referring to an oral disclosure, use, exhibition or other means		
"P"	document published prior to the international filing date but later than the priority date claimed		

Date of the actual completion of the international search	Date of mailing of the international search report
17 May 2004 (17.05.2004)	02 JUL 2004
Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized Officer  Robert E. Mondesi Telephone No. (571) 272-1600